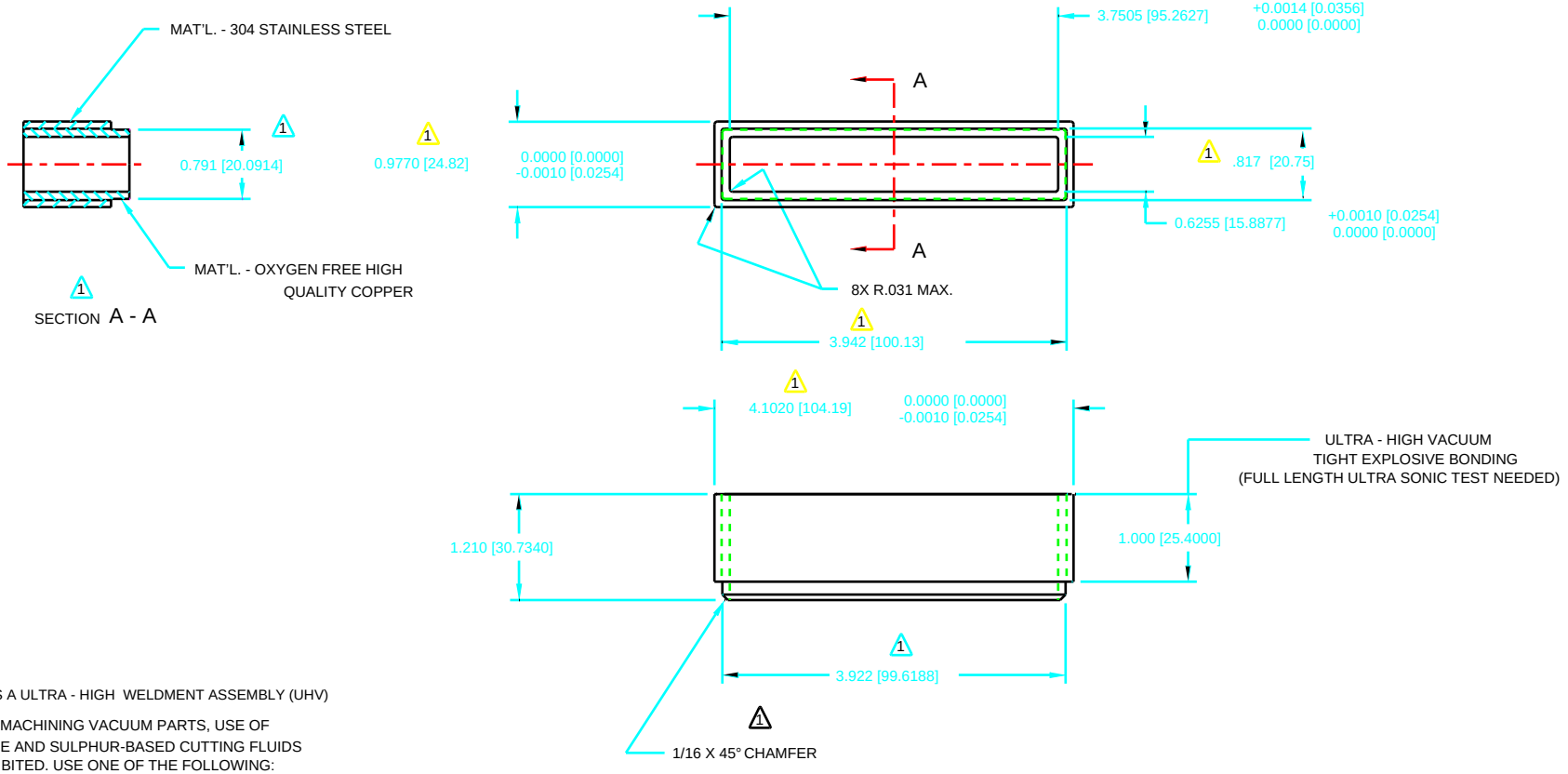
(℄	PLOT SCALE: 1=1	DWG. SCALE: 1	A12597



NOTES:

1. THIS IS A ULTRA - HIGH WELDMENT ASSEMBLY (UHV)
2. WHEN MACHINING VACUUM PARTS, USE OF SILICONE AND SULPHUR-BASED CUTTING FLUIDS IS PROHIBITED. USE ONE OF THE FOLLOWING:
   - A) CIMCOOL 5 STAR 49
   - B) TRIM SOL
3. WELDMENT ASSEMBLY SHALL BE LEAK TESTED USING A MASS SPECTROMETER WITH MINIMUN SENSITIVITY FOR HELIUM OF 2X 10 -10 STANDARD CC/SEC PER LEAK METER DIVISION, SUCH AS:
   - ALCATEL ASM-11OTCL
   - VARIAN NCR 925 OR 936
   - VEECO MS-9, MS-90 OR MS-18
   - Du PONT CEC 24-120B

   CALIBRATION OF THE LEAK DETECTOR SENSITIVITY SHALL BE PERFORMED JUST PRIOR TO TESTING.

   FINAL TEST WILL CONSIST OF SURROUNDING THE ASSEMBLY (BAGGING) WITH HELIUM. THE ASSEMBLY WILL BE REJECTED IF A 2% DEFLECTION IN THE MOST SENSITIVE RANGE OF THE LEAK DETECTOR IS SENSED WITHIN 1 MIN.
4. DIMENSIONS IN [ ] ARE MILLIMETERS
5. CERTIFICATION OF ULTRASONIC TEST AND VACUUM EXAMINATION SHALL BE SIGNED BY A CONTRACTOR REPRESENTATIVE TO SIGN SUCH CERTIFICATIONS.

SYM	CHANGE DESCRIPTION	BY	CHKD	DATE
1	.791 ADDED			
1	3.922 ADDED			
1	SECTION A - A ADDED			
1	3.942[100.13] WAS 3.90[99.06]			
1	.817 [20.75] WAS .78 [19.81]			
1	4.1020 WAS 4.0620			
1	.9770[24.82] WAS .9370[23.80]			
1	1/16 X 45° CHAMFER WAS 45°	M.J.M.		

REVISIONS

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY

PARTS LIST

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES
TOLERANCES
DECIMALS: .X ± .03 [.7620], .XX ± .01 [0.25], .XXX ± .005 [0.127]
ANGULAR ± .25
SURFACE ROUGHNESS 125
REMOVE ALL BURRS AND BREAK SHARP EDGES .03 MAX.
SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ANSI B46.1
DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST ANSI Y14.5
DO NOT SCALE DRAWING

LOG NUMBER: A12597

THIS DRAWING IS THE PROPERTY OF ARGONNE NATIONAL LABORATORY

DRAWN BY: MUSCIA	DATE: 8/3/92	CHIEF DESIGN ENGINEER: D. SHU	DATE: 2/3/93
CHECKED BY:		GP LEADER: T.M. KUZAY	2/3/93
DESIGNER: MUSCIA		PROJECT MGR.	
RESPONSIBLE ENGINEER: D. SHU	2/3/93	APPROVED/RELEASED	

TITLE: ADVANCED PHOTON SOURCE
P1 1 ST PHOTON SHUTTER
COPPER TO METAL ADAPTER
WELDMENT

MATERIAL: SEE ABOVE
SCALE: 1:1
SIZE: C
DRAWING NUMBER: P4102010103-210402-01
SHEET 1 of 1